

### Types of TV Shopping Programs Watched

The type of TV shopping program most watched is Direct TV Shopping with 52% of the viewers acknowledging that they watch this type of shopping program very (17%) or somewhat (35%) often. Forty-four percent of TV shopping viewers watch TV shopping very (12%) or somewhat (32%) often. Of the three listings, Informational Programs are the least watched with only 10% watching them very often and 29% watching them somewhat often (Table 8).

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TABLE 8

#### TYPES OF TV SHOPPING PROGRAMS WATCHED

Q.: How often do you watch (READ EACH ITEM) - very often, somewhat often, not very often, or not at all?

	<u>Very Often</u> %	<u>Somewhat Often</u> %	<u>Not Very Often</u> %	<u>Not At All</u> %
Direct TV shopping (a regular 30-second one product advertisement)	17	35%	31%	14%
TV shopping (advertising six or seven products within an hour continually)	12	32	40	15
Informational programs (a 30-minute one product advertisement)	10	29	38	22

## **APPENDIX A: METHODOLOGY**

## METHODOLOGY

This report presents the results of a survey of 1006 adults who watch TV shopping programs once a week or more often. Fieldwork was conducted between December 10 and December 14, 1993. The sample was designed to be a representative cross-section of people who watch TV shopping programs in the contiguous 48 states. In order to find and interview the 1006 viewers a total of 5,250 screening interviews were completed. A total of 19% of this nationwide cross-section of adults qualified as viewers for the full interview.

A detailed description of how our nationwide cross-section survey was designed follows.

### Telephone Interviewing Procedures

The Louis Harris and Associates, Inc., National Telephone Sample is based on a methodology that is designed to produce representative samples of persons in telephone households in the 48 continental United States and the District of Columbia. The Harris National Telephone Sample makes use of random-digit selection procedures which assure sample representation of persons in both households which are "listed" in telephone directories, as well as persons in households which are "unlisted" in telephone directories.<sup>1</sup> The sample design is also explicitly designed to assure proper representation of households in central city, suburban, and rural areas within the Continental United States (i.e. the 48 states and the District of Colombia).

The Harris National Telephone Sample is selected by a two-stage, stratified sampling process. The ultimate result of this process is a set of sample selections (phone numbers). In order to assure that the maximum degree of sample control is maintained, the basic sample design makes use of sample stratification defined on the basis of individual states and up to four levels of urbanization within each state.

### Formation of First Stage Strata

In preparation for the first stage of sample selection, all of the possible phone numbers in the entire United States are divided into 192 basic first-stage strata defined on the basis of urbanicity and individual state.

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<sup>1</sup> Some households are "unlisted" as the result of a request for an unlisted number by the telephone subscriber. Other households are "unlisted" in the published directory because the telephone number was assigned after the publication date of the directory. Samples that are restricted to directory-listed numbers only may contain serious sample biases because of the exclusion of the various types of unlisted households.

The U.S. Census Bureau classifies all areas within the U.S. into three urbanization groupings. All areas that are within Metropolitan Statistical Areas<sup>2</sup> (MSAs) or Consolidated Metropolitan Statistical Areas (CMSAs) are considered to be metropolitan or urban. Urban areas are further subdivided into Central City Areas (the land area within the city limits of the major city or cities associated with the MSA or CMSA) and Suburban Areas (the non Central City portion of the MSA or CMSA). The remaining counties (i.e. those not contained within MSAs or CMSAs) are considered non-metropolitan (i.e. rural).

The U.S. Census urbanicity classification system was further refined by subdividing non-MSA/CMSA (rural) areas into two sub-groups based on the presence or absence of a city or town of size 2,500 households within the county area. Those counties which contain at least one city or town with 2,500 or more households are in one sub-group and counties which do not contain at least one city or town with 2,500 or more households are in the other sub-group.

This further refinement produces a four category urbanization classification consisting of: 1) Central City portions of Metropolitan Statistical Areas (MSAs) or Consolidated Metropolitan Statistical Areas (CMSAs); 2) Non-Central City Balance portions of MSAs or CMSAs; 3) non-MSA/CMSA counties that contain at least one city/town of 2,500 or more households (Rural - I) and; 4) non-MSA/CMSA counties that do not contain at least one city/town of 2,500 or more households (Rural - II).

The cross-classification of these four urbanization categories with the continental United States produces  $4 \times 49 = 196$  possible urbanicity by state cells or strata. In fact, 7 of these possible strata contain no areas (e.g. New Jersey does not have any non MSA/CMSA counties). There are a total of 189 urbanicity by state strata that contain any households. On the basis of data that has been developed by Survey Sampling Inc. each telephone exchange in the continental United States is assigned to one of these 189 urbanicity by state strata.

### **Sample Allocation Among The Strata**

The process of determining how many sample elements (households) should be selected from each stratum is known as sample allocation. The Harris National Telephone Sample is allocated among the first-stage basic strata on the basis of 1991 household estimates prepared from U.S. Census data by National Planning Data Inc. The process is carried out as follows: Each of the 189 strata accounts for some fraction of the total households of the continental United States. The fraction of the total sample allocated to each stratum is proportionate to the number of households contained within the stratum. For example, the stratum consisting of New

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<sup>2</sup> Metropolitan Statistical Areas and Consolidated Metropolitan Statistical Areas are defined by the U.S. Department of Commerce on the basis of U.S. Census Bureau statistics. In general, MSAs and CMSAs are comprised of entire county unit groups. An exception to this occurs in New England where MSAs and CMSAs are based on grouping of townships and cities.

York Rural - I (non-MSA) counties in New York State with at least one city or town of 2,500 households, accounts for 0.5066% of the total households in the Continental United States. As a result, for a cross-sectional sample design consisting of 1,250 telephone households, the New York rural - I stratum receives an allocation of approximately six households. [ $1,250 \times 0.005066 = 6.33 = 6$  (rounded)] Each stratum, in turn, receives an allocation of sample households in direct proportion to the number of total households contained within its borders relative to the total households of the continental U.S.<sup>3</sup>

Table 1 shows the percentage of sample households within each of the 189 basic strata. Tables 2, 3 and 4 show the number of sample households that are allocated to each of the 189 basic strata for sample designs consisting of 500-, 1,000-, and 1,250-households.

### **First Stage Sampling Units within Strata**

Once the sample allocation is determined among the 189 basic strata, the first stage of sample selection is carried out. The units that are eligible for selection at this point are "banks" of 100 possible telephone numbers. A telephone number consists of an area code, a 3 digit prefix and a 4 digit suffix. A bank is defined as a series of 100 possible telephone numbers with a specific area code a specific 3 digit exchange and specific set of first two (of four) suffix digits and all last two digits in the range 00 through 99. For instance, a bank of telephone numbers might consist of all numbers between (212)-954-1100 and (212)-954-1199. The first 8 of the 10 digits in the full number of the same and the last two numbers range from 00 through 99.

Information provided by Survey Sampling Inc. is used to assign a probability of selection to each possible bank of 100 numbers contained within the stratum. This "measure of size" used for this assignment of probability is the number of listed numbers within the bank. Banks with fewer than 3 listed numbers are assigned a zero probability of selection.<sup>4</sup>

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<sup>3</sup> When the allocation process results in a decimal fraction a randomization method is used which determines whether the allocation lower or higher inter value should be used. If the allocation was 6.33, then the allocation would be 6 with probability 0.33 and 7 with probability 0.67.

<sup>4</sup> It should be noted that the use of listed numbers to assign probabilities of selection does not eliminate unlisted numbers from being given a chance of selection. The first stage selection process is only used to select banks of numbers. The selection of a final telephone number within the bank is carried out in the second stage of sampling. This second stage selection includes both listed and unlisted numbers. Several studies have shown that the number of actual telephone households (both listed and unlisted) included in these eliminated banks is quite small (1-3%). The actual measure of size is modified by multiplying the number of listed numbers within the bank by a factor equal to county population divided by the number of listed numbers.

### **Selection of First Stage Sampling Units (Banks) Within Stratum**

Within each basic stratum the banks of telephone numbers are ordered by county and area-code prefix within county. A systematic random selection procedure is used to select the telephone banks that will be used in a specific sample. The number of telephone banks selected depends upon the allocation assigned to the particular stratum, which in turn, depends upon the total sample size and percent of households in the stratum.

The systematic random selection process gives each bank in the population a probability of selection proportional to its "measure of size." This is accomplished by forming cumulative sub-totals of the measure of size for each bank and all preceding banks. The systematic sampling "interval" is equal to the final cumulated sub-total which covers all banks within the stratum, divided by the number of selections allocated to the stratum. A random start is computer generated within the systematic sampling interval, and the interval is successively added to this start to obtain the sample selection numbers. The cumulative sub-totals are used in conjunction with these sample selection numbers in order to determine the banks within which these selection numbers fall. These are the banks that are selected for subsequent sampling.

The banks selected by this process within a stratum are known as the primary banks. For each study, a set of k secondary banks are selected for each primary bank. The number of secondary banks may vary on a study specific basis. Typically k is set to five.

The secondary banks are selected in much the same way as the primary banks with the constraint that all secondary banks associated with a primary bank must be selected from the same county. This assures that the final resulting sample will be distributed among the various counties within a stratum as per the selection of primary banks.

### **Second Stage Sample Selection of Telephone Numbers**

In the second stage of selection, the actual telephone numbers that will be contacted are selected. The actual size of the final sample will vary with the project but typical sample sizes are 1,000 or 1,250 respondents. In the first stage of sampling, the number of a primary-secondary bank sets is equal to the total number of final sample respondents to be included in the study<sup>5</sup>.

For each selection in the first stage (i.e. primary and secondary banks), a full 10 digit telephone number is selected. This is accomplished by the addition of two random digits to the selected bank. For instance, if the selected bank consists of area code 212, the prefix 986 and the first two digits of the suffix 34, and if the selected two random digits are 83, then the final number will be (212) 986-3483.

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<sup>5</sup> In those cases where "screening" is used, the number of primary-secondary selection sets will be equal to the total number of completed screeners.

In the second stage of sampling, a full 10 digit telephone number is selected for each primary selection and all of the secondary banks associated with the primary bank. Typically the total number of telephone numbers generated for each primary-secondary bank set will be 10.

In the process of conducting interviews, an attempt is made to contact the first telephone number selected for each PSU. If it is determined that the number is not a working telephone number, or if the telephone household refuses to participate in an interview, an interview attempt is made at the next selected number associated with the selected PSU. In the case of "no answer" at the selected number, the specific study specifications will dictate the number of different attempts that are made prior to replacement with the next generated number for the PSU. In general, the replacement process continues within each selected PSU until a successful interview is completed.

**TABLE I**

Percentages of 49 x 4 Strata  
C. City Suburban Rural-I Rural-II

ALABAMA	0.488%	0.620%	0.340%	0.194%
ARIZONA	0.852%	0.357%	0.219%	0.050%
ARKANSAS	0.234%	0.157%	0.371%	0.223%
CALIFORNIA	4.587%	6.452%	0.392%	0.110%
COLORADO	0.536%	0.609%	0.117%	0.121%
CONNECTICUT	0.463%	0.741%	0.108%	0.000%
DELAWARE	0.032%	0.148%	0.042%	0.049%
DISTRICT OF COLUMBIA	0.265%	0.000%	0.000%	0.000%
FLORIDA	1.670%	3.394%	0.389%	0.127%
GEORGIA	0.488%	1.207%	0.454%	0.403%
IDAHO	0.051%	0.033%	0.206%	0.109%
ILLINOIS	1.848%	2.041%	0.572%	0.257%
INDIANA	0.835%	0.728%	0.477%	0.240%
IOWA	0.328%	0.195%	0.338%	0.313%
KANSAS	0.320%	0.234%	0.286%	0.203%
KENTUCKY	0.298%	0.426%	0.313%	0.469%
LOUISIANA	0.468%	0.708%	0.302%	0.185%
MAINE	0.023%	0.181%	0.204%	0.102%
MARYLAND	0.360%	1.388%	0.100%	0.035%
MASSACHUSETTS	0.859%	1.435%	0.113%	0.009%
MICHIGAN	0.926%	2.032%	0.405%	0.340%
MINNESOTA	0.439%	0.783%	0.328%	0.235%
MISSISSIPPI	0.132%	0.183%	0.370%	0.315%
MISSOURI	0.529%	0.893%	0.352%	0.359%
MONTANA	0.062%	0.021%	0.129%	0.118%
NEBRASKA	0.255%	0.071%	0.167%	0.179%
NEVADA	0.156%	0.246%	0.029%	0.051%
NEW HAMPSHIRE	0.112%	0.161%	0.159%	0.016%
NEW JERSEY	0.478%	2.618%	0.000%	0.000%
NEW MEXICO	0.217%	0.091%	0.260%	0.028%
NEW YORK	3.891%	2.897%	0.507%	0.106%
NORTH CAROLINA	0.705%	0.824%	0.790%	0.395%
NORTH DAKOTA	0.072%	0.035%	0.067%	0.088%
OHIO	1.394%	2.170%	0.765%	0.142%
OKLAHOMA	0.455%	0.330%	0.340%	0.194%
OREGON	0.359%	0.482%	0.327%	0.055%
PENNSYLVANIA	1.293%	2.867%	0.493%	0.233%
RHODE ISLAND	0.122%	0.251%	0.034%	0.000%
SOUTH CAROLINA	0.155%	0.671%	0.395%	0.125%
SOUTH DAKOTA	0.072%	0.020%	0.078%	0.121%
TENNESSEE	0.784%	0.601%	0.392%	0.268%
TEXAS	3.302%	2.060%	0.657%	0.535%
UTAH	0.144%	0.305%	0.072%	0.051%
VERMONT	0.016%	0.039%	0.112%	0.067%
VIRGINIA	0.742%	1.060%	0.176%	0.489%
WASHINGTON	0.607%	1.063%	0.301%	0.068%
WEST VIRGINIA	0.097%	0.188%	0.191%	0.276%
WISCONSIN	0.671%	0.667%	0.419%	0.229%
WYOMING	0.041%	0.016%	0.084%	0.044%



**TABLE 2**

Sample Allocation n = 500  
C. City Suburban Rural-I Rural-II

ALABAMA	2.44	3.10	1.70	0.97
ARIZONA	4.26	1.78	1.10	0.25
ARKANSAS	1.17	0.79	1.86	1.12
CALIFORNIA	22.94	32.26	1.96	0.55
COLORADO	2.68	3.04	0.58	0.60
CONNECTICUT	2.32	3.70	0.54	0.00
DELAWARE	0.16	0.74	0.21	0.25
DISTRICT OF COLUMBIA	1.32	0.00	0.00	0.00
FLORIDA	8.35	16.97	1.94	0.63
GEORGIA	2.44	6.03	2.27	2.02
IDAHO	0.26	0.17	1.03	0.55
ILLINOIS	9.24	10.21	2.86	1.29
INDIANA	4.17	3.64	2.39	1.20
IOWA	1.64	0.97	1.69	1.56
KANSAS	1.60	1.17	1.43	1.02
KENTUCKY	1.49	2.13	1.57	2.34
LOUISIANA	2.34	3.54	1.51	0.93
MAINE	0.12	0.91	1.02	0.51
MARYLAND	1.80	6.94	0.50	0.18
MASSACHUSETTS	4.30	7.18	0.57	0.05
MICHIGAN	4.63	10.16	2.02	1.70
MINNESOTA	2.19	3.92	1.64	1.17
MISSISSIPPI	0.66	0.91	1.85	1.58
MISSOURI	2.65	4.47	1.76	1.79
MONTANA	0.31	0.10	0.65	0.59
NEBRASKA	1.27	0.36	0.83	0.89
NEVADA	0.78	1.23	0.15	0.26
NEW HAMPSHIRE	0.56	0.81	0.79	0.08
NEW JERSEY	2.39	13.09	0.00	0.00
NEW MEXICO	1.09	0.45	1.30	0.14
NEW YORK	19.46	14.49	2.53	0.53
NORTH CAROLINA	3.53	4.12	3.95	1.97
NORTH DAKOTA	0.36	0.17	0.34	0.44
OHIO	6.97	10.85	3.82	0.71
OKLAHOMA	2.28	1.65	1.70	0.97
OREGON	1.79	2.41	1.64	0.28
PENNSYLVANIA	6.46	14.33	2.46	1.16
RHODE ISLAND	0.61	1.25	0.17	0.00
SOUTH CAROLINA	0.77	3.36	1.98	0.62
SOUTH DAKOTA	0.36	0.10	0.39	0.60
TENNESSEE	3.92	3.01	1.96	1.34
TEXAS	16.51	10.30	3.29	2.67
UTAH	0.72	1.53	0.36	0.25
VERMONT	0.08	0.20	0.56	0.34
VIRGINIA	3.71	5.30	0.88	2.45
WASHINGTON	3.04	5.32	1.51	0.34
WEST VIRGINIA	0.48	0.94	0.96	1.38
WISCONSIN	3.36	3.33	2.09	1.14
WYOMING	0.20	0.08	0.42	0.22

**TABLE 3**

Sample Allocation n = 1000  
C. City Suburban Rural-I Rural-II

ALABAMA	4.88	6.20	3.40	1.94
ARIZONA	8.52	3.57	2.19	0.50
ARKANSAS	2.34	1.57	3.71	2.23
CALIFORNIA	45.87	64.52	3.92	1.10
COLORADO	5.36	6.09	1.17	1.21
CONNECTICUT	4.63	7.41	1.08	0.00
DELAWARE	0.32	1.48	0.42	0.49
DISTRICT OF COLUMBIA	2.65	0.00	0.00	0.00
FLORIDA	16.70	33.94	3.89	1.27
GEORGIA	4.88	12.07	4.54	4.03
IDAHO	0.51	0.33	2.06	1.09
ILLINOIS	18.48	20.41	5.72	2.57
INDIANA	8.35	7.28	4.77	2.40
IOWA	3.28	1.95	3.38	3.13
KANSAS	3.20	2.34	2.86	2.03
KENTUCKY	2.98	4.26	3.13	4.69
LOUISIANA	4.68	7.08	3.02	1.85
MAINE	0.23	1.81	2.04	1.02
MARYLAND	3.60	13.88	1.00	0.35
MASSACHUSETTS	8.59	14.35	1.13	0.09
MICHIGAN	9.26	20.32	4.05	3.40
MINNESOTA	4.39	7.83	3.28	2.35
MISSISSIPPI	1.32	1.83	3.70	3.15
MISSOURI	5.29	8.93	3.52	3.59
MONTANA	0.62	0.21	1.29	1.18
NEBRASKA	2.55	0.71	1.67	1.79
NEVADA	1.56	2.46	0.29	0.51
NEW HAMPSHIRE	1.12	1.61	1.59	0.16
NEW JERSEY	4.78	26.18	0.00	0.00
NEW MEXICO	2.17	0.91	2.60	0.28
NEW YORK	38.91	28.97	5.07	1.06
NORTH CAROLINA	7.05	8.24	7.90	3.95
NORTH DAKOTA	0.72	0.35	0.67	0.88
OHIO	13.94	21.70	7.65	1.42
OKLAHOMA	4.55	3.30	3.40	1.94
OREGON	3.59	4.82	3.27	0.55
PENNSYLVANIA	12.93	28.67	4.93	2.33
RHODE ISLAND	1.22	2.51	0.34	0.00
SOUTH CAROLINA	1.55	6.71	3.95	1.25
SOUTH DAKOTA	0.72	0.20	0.78	1.21
TENNESSEE	7.84	6.01	3.92	2.68
TEXAS	33.02	20.60	6.57	5.35
UTAH	1.44	3.05	0.72	0.51
VERMONT	0.16	0.39	1.12	0.67
VIRGINIA	7.42	10.60	1.76	4.89
WASHINGTON	6.07	10.63	3.01	0.68
WEST VIRGINIA	0.97	1.88	1.91	2.76
WISCONSIN	6.71	6.67	4.19	2.29
WYOMING	0.41	0.16	0.84	0.44

**TABLE 4**

Sample Allocation n = 1250  
C. City Suburban Rural-I Rural-II

ALABAMA	6.10	7.76	4.25	2.42
ARIZONA	10.65	4.46	2.74	0.63
ARKANSAS	2.92	1.96	4.64	2.79
CALIFORNIA	57.34	80.65	4.90	1.38
COLORADO	6.70	7.61	1.46	1.51
CONNECTICUT	5.79	9.26	1.35	0.00
DELAWARE	0.40	1.85	0.53	0.62
DISTRICT OF COLUMBIA	3.31	0.00	0.00	0.00
FLORIDA	20.87	42.42	4.86	1.59
GEORGIA	6.10	15.08	5.68	5.04
IDAHO	0.64	0.41	2.57	1.37
ILLINOIS	23.10	25.51	7.15	3.22
INDIANA	10.43	9.10	5.96	3.00
IOWA	4.10	2.43	4.23	3.91
KANSAS	4.00	2.92	3.58	2.54
KENTUCKY	3.72	5.32	3.92	5.86
LOUISIANA	5.85	8.84	3.78	2.32
MAINE	0.29	2.26	2.55	1.28
MARYLAND	4.50	17.35	1.25	0.44
MASSACHUSETTS	10.74	17.94	1.41	0.11
MICHIGAN	11.57	25.40	5.06	4.25
MINNESOTA	5.48	9.79	4.10	2.93
MISSISSIPPI	1.65	2.29	4.63	3.94
MISSOURI	6.62	11.17	4.40	4.49
MONTANA	0.77	0.26	1.61	1.47
NEBRASKA	3.18	0.89	2.09	2.23
NEVADA	1.95	3.07	0.37	0.64
NEW HAMPSHIRE	1.40	2.01	1.98	0.20
NEW JERSEY	5.97	32.72	0.00	0.00
NEW MEXICO	2.71	1.13	3.25	0.35
NEW YORK	48.64	36.22	6.33	1.32
NORTH CAROLINA	8.82	10.31	9.88	4.94
NORTH DAKOTA	0.90	0.43	0.84	1.09
OHIO	17.43	27.13	9.56	1.78
OKLAHOMA	5.69	4.12	4.25	2.42
OREGON	4.49	6.03	4.09	0.69
PENNSYLVANIA	16.16	35.83	6.16	2.91
RHODE ISLAND	1.53	3.13	0.42	0.00
SOUTH CAROLINA	1.93	8.39	4.94	1.56
SOUTH DAKOTA	0.90	0.25	0.97	1.51
TENNESSEE	9.79	7.52	4.90	3.35
TEXAS	41.28	25.75	8.22	6.68
UTAH	1.81	3.82	0.90	0.64
VERMONT	0.21	0.49	1.40	0.84
VIRGINIA	9.27	13.26	2.20	6.12
WASHINGTON	7.59	13.29	3.76	0.85
WEST VIRGINIA	1.21	2.35	2.39	3.45
WISCONSIN	8.39	8.33	5.24	2.86
WYOMING	0.51	0.19	1.05	0.55

## **TELEPHONE INTERVIEWING PROCEDURES**

All survey data collection is conducted from the centralized telephone (CATI) research center of Louis Harris and Associates, Inc., in New York City. Screening and interviewing for the study are conducted by Harris' large, professional interviewing staff. All aspects of interviewer recruitment, scheduling, and training are directed by the administrative staff of the telephone research center. Interviewing is continuously quality-monitored by Harris' field supervisory staff.

The telephone administrative staff directs operations according to the specifications of the Project Director and analytical staff. At the Harris firm it is absolutely vital that there is an ongoing discussion between the Operations departments and the Analytic staff. This ensures a smoother running study leading to fewer errors.

### **Telephone Interviewers and Facilities**

By directly supervising the interviewing staff and continuously monitoring the interviews, a telephone survey achieves a uniformity in the administration of the survey instrument and the recording of survey responses that could not be approached by in-person interviewing. Problems in the instrument, training, or interviewing staff are detected almost immediately and corrected.

Louis Harris and Associates maintains its centralized telephone research facility in New York City. This facility has 40 fully monitored and fully supervised interviewing positions. The unobtrusive monitoring facility allows our telephone supervisors to continuously monitor interviewer performance.

Most projects utilize Harris' computer-assisted telephone interviewing (CATI) system. There are 40 CRT telephone interviewing positions. The CATI system utilizes a NCR 486 tower server, the SCO UNIX operating system and Quancept software developed by Quantime Ltd.

The staff for the telephone research center includes approximately 125 to 150 interviewers who have a regular and permanent interviewing schedule. Within this larger staff, Harris maintains a full-time, permanent staff of thirty to forty interviewers to conduct and supervise surveys among business executives, government official, doctors, other difficult-to-reach elite populations and the public.

These interviewers are often college students, advanced graduate students or retired professionals. A hallmark of Harris interviewers is that many of them also come from the arts community in New York City -- actors, artists, musicians, and dancers, who by nature of their professions are "quick Studies" of difficult questionnaire instruments, engaging interviewers and flexible employees. In addition, many of them who have had acting experience are an invaluable resource because they have had voice and diction training, as well as an ability to repeat lines accurately and with interest.

## **Computer-Assisted Telephone Interviewing**

The hard copy questionnaire is programmed into the computer-assisted telephone interviewing system. The CATI script is programmed by the Harris computer programming staff. In addition, before interviewing begins a specific output editing program is written for each project. This double checks ranges, skip patterns, section and question rotation, consistency, and any project specific requirements.

The project team tests the CATI program thoroughly on its own CRTs -- running the interviewing program extensively through multiple loops.

The computer-assisted telephone interviewing system greatly enhances recording reliability. The data entry program does not permit interviewers to inadvertently skip questions - each has to be answered before the computer presents the next question. The data entry program also ensures that the correct skip patterns are followed. The on-line data editing system refuses to accept punches that are out-of-range, demands confirmation of responses that exceeded expected bounds, and asks for explanations for inconsistencies between certain key responses.

All interviewers are audio-monitored by Harris line supervisors at least once during each shift. The silent monitoring equipment used by the Harris supervisors means that interviewers never know when they are being monitored. If any problems are detected, once the interview has ended a supervisor will immediately discuss with the interviewer ways to improve.

Supervisors also observe CATI recording directly on a supervisor's CRT screen, which displays the questions and answers on any particular interviewer's screen. While monitoring, a supervisor will also record verbatim the responses to open-ended questions and then compare these with the verbatims that the interviewer wrote down. Line supervisors use a formal evaluation report form when monitoring interviewers. Monthly records of these evaluation forms are reviewed by our supervisory staff. This helps us identify potential or recurring problems. These evaluations are also used to schedule supplementary training classes.

We record open-ended questions verbatim on interviewing forms, rather than entering them directly onto CATI. Since we insist on full verbatim records, direct key entry requires either fast typing or a slow interview. We prefer to select our interviewers on the basis of their interviewing skills rather than on their typing speed. Hence, we use EDP clerks to transfer the written verbatims onto the computer file at the end of the day.

## **Interviewer Training**

All interviewers are thoroughly trained, as well as closely supervised. Special training sessions are undertaken to help ensure quality control over the collection of survey data. All interviewers attend a 2 - 3 day training session when they are first hired. This training is designed to teach the basics of telephone interviewing.

At the beginning of a study, all assigned field staff participate in a series of additional training sessions. This training may be thought of as being divided into two segments. The first phase of training requires review of the general principles of survey research and interviewing.

The second phase of training deals specifically with the requirements of the study at hand. Operationally, both sets of information are covered simultaneously in training sessions. In these sessions, the specific requirements of the study to be performed are used to breathe life into, and demonstrate how, the general principles of survey research are to be actually operationalized.

The Harris Field Department has developed special interviewing and computer training manuals. Training materials include: item-by-item specifications; decision algorithms for contact and location procedures, case reporting protocols; procedures to maximize the probability of obtaining sensitive information from respondents; proper CATI recording procedures for open-ended items; and additional reporting and quality control requirements for this effort. Special training materials were designed to be maximally useful not only as training tools, but also as reference materials for use throughout the fieldwork portion of this study. Additional training and workshops are concluded on a regular basis to work on specific skills or problems.

The Harris Field Department uses two different methods for respondent selection in households. Selection of which method depends on the specific requirements of each study.

### **Respondent Selection (Youngest Person/Male/Female)**

Under the standardized procedures, the interviewer asks for one of the following household members, in order of priority: (1) youngest adult male at home, (2) next youngest male at home, (3) youngest adult female at home, or (4) next youngest female at home. This procedure results in an acceptable distribution of respondent's sex and age.

### **Control of the Sample**

In order to maintain reliability and integrity in the sample, the telephone field staff follows these procedures when a respondent contact is attempted:

- A nonanswering telephone is dialed three more times at different time or day/night over a three-day period. At the end of this time, if no contact is made, a new telephone number is generated immediately for that PSU.
- If a business telephone is reached, or if contact is made with a household in which a potential respondent presents a language barrier, a new telephone number is generated for that PSU.
- Once a residential contact is established, the interviewer uses the respondent selection procedure to designate someone in the household for the interview.

### **Callback Strategy**

In order to attain the highest possible response rates within reasonable cost constraints, callbacks are made according to the following guidelines:

**No Answer/Not-at-Home:** An initial call and then three callbacks to reach an adult member of the household. Callbacks are made on different days and at different times of the day. After the fourth call, the household is replaced by another number in that PSU.

**Refusals:** Three callbacks or one contact to try to convert any designated respondent who has refused or terminated an interview. If, after the conversion attempt, the designated respondent still declines the interview, another household is selected in that PSU. If we get a specified time to callback for respondent, we will follow up on that call.

**Unavailable Respondents:** An initial call and three callbacks to reach the designated member of the household. If, after the fourth call, the respondent is still not available for the interview, unless we get a specified appointment on the 4th call another household is selected in that PSU.

**Busy Signals:** An initial call, a follow-up fifteen minutes later, and three callbacks to reach a member of the household. Callbacks are made on different days and at different times of the day. If the telephone is still busy after the fourth call, a new number is selected in that PSU and the household is replaced.

### **Weighting**

All national public cross sections are weighted to the Census Bureau's latest population parameters on region, education, sex, race, and age. This adjusts these key variables, where necessary, to their actual proportions in the population. Only moderate weighting is necessary in Harris samples.

## **SAMPLING ERROR, PRECISION, AND PROJECTABILITY OF THE SURVEY**

### **Sampling Error**

The results achieved from all sample surveys are subject to sampling error. Sampling error is defined as the difference between the results obtained from the sample and those that would have been obtained had the entire relevant population been surveyed. The size of the sampling error varies both with the size of the sample and with the percentage giving a particular answer. Table 5 sets for the range of error in samples of different sizes at different percentages of response.

For example, if the response for a sample size of 1,000 is 30%, in 95 cases out of 100 the response in the total population would be between 27% and 33%.

### **Significance of Difference Between Proportions**

The differences between the percentage responses given by two independent samples to the same question may or may not be significant. To determine whether or not such a difference is indeed significant, the size of the samples involved and the percentage giving each response must be taken into account. Table 6 shows the margin of error that must be allowed for different sample sizes at different percentages of response.

For example, suppose one group of size 500 has a response of 35% "yes" for a question, and an independent group of size 200 has a response of 26% "yes" for the same question, for a difference of 9 percentage points. According to the table, this difference is subject to a potential sampling error of plus or minus 8 percentage points. Since the observed difference is greater than the potential sampling error, the observed difference is significant. Moreover, if the entire population were interviewed, the difference would be from 1 to 17 percentage points (the 9-point observed difference plus or minus the 8-point potential sampling error) in 95 cases out of 100.

The recommended allowances for sampling error and significance of difference were calculated based on a simple random sample.

### **Nonsampling Error**

Sampling error is only one way in which survey findings may vary from the findings that would result from interviewing every member of the relevant population. Survey research is susceptible to human and mechanical errors as well, such as interviewer recording and data handling errors. However, the procedures used by the Harris firm keep errors of this kind to a minimum.

An example of these procedures is the Harris CATI system -- computer - assisted telephone interviewing -- which was discussed earlier. This system controls complicated skip patterns based on individual responses during the course of the interview, and it also allows



consistency checks to be built in for key items. It furthermore reduces clerical error by eliminating the need for keypunching, since interviewers enter the respondents' answers directly into a computer terminal during the interview itself.

Table 5

**APPROXIMATE SAMPLING TOLERANCES (AT 95% CONFIDENCE)  
TO USE IN EVALUATING PERCENTAGE RESULTS FROM SURVEY**

<b>Number of People Asked Question on Which Survey Result is Based</b>	<b>Survey Percentage Result at <u>10% or 90%</u></b>	<b>Survey Percentage Result at <u>20% or 80%</u></b>	<b>Survey Percentage Result at <u>30% or 70%</u></b>	<b>Survey Percentage Result at <u>40% or 60%</u></b>	<b>Survey Percentage Result at <u>50%</u></b>
7,500	1	1	1	1	1
5,000	1	1	1	1	1
3,000	1	1	2	2	2
2,000	1	2	2	2	2
1,500	2	2	2	3	3
1,000	2	2	3	3	3
900	2	3	3	3	3
800	2	3	3	3	3
700	2	3	3	4	4
600	2	3	4	4	4
500	3	4	4	4	4
400	3	4	4	5	5
300	3	5	5	6	6
200	4	6	6	7	7
100	6	8	9	10	10
50	8	11	13	14	14

Table 6

**APPROXIMATE SAMPLING TOLERANCES (AT 95% CONFIDENCE) TO USE IN  
EVALUATING DIFFERENCES BETWEEN TWO PERCENTAGE RESULTS FROM SURVEY**

<b>Approx Sample Size of 2 Groups Survey Asked Question Percent- age on Which Survey Result at Result is Based</b>	<b>Survey Percentage Result at 10% or 90%</b>	<b>Survey Percentage Result at 20% or 80%</b>	<b>Survey Percentage Result at 30% or 70%</b>	<b>Survey Percentage Result at 40% or 60%</b>	<b>50%</b>
5,000 vs. 2,000	2	2	2	3	3
1,000	2	3	3	3	3
500	3	4	4	5	5
300	3	5	5	6	6
200	4	6	6	7	7
100	6	8	9	10	10
50	8	11	13	14	14
2,000 vs. 2,000	2	2	3	3	3
1,000	2	3	4	4	4
500	3	4	4	5	5
300	4	5	6	6	6
200	4	6	7	7	7
100	6	8	9	11	10
50	9	11	13	14	14
1,000 vs. 1,000	3	4	4	4	4
500	3	4	5	5	5
300	4	5	6	6	6
200	5	6	7	7	8
100	6	8	9	10	10
50	9	11	13	14	14
500 vs. 500	4	4	6	6	6
300	4	6	7	7	7
200	6	7	8	8	8
100	7	9	10	11	11
50	9	12	13	14	15
300 vs. 300	5	6	7	8	8
200	5	7	8	9	9
100	7	9	10	11	11
50	9	12	14	15	15
200 vs. 200	6	8	9	10	10
100	7	10	11	12	12
50	9	12	14	15	15
100 vs. 100	8	11	13	14	14
50	10	14	16	17	17
50 vs. 50	12	16	18	19	20

### **Coding, Editing, and Cleaning of Data**

Open-ended questions required manual coding prior to data entry. Responses are coded by our in-house coding staff, under the direct supervision of the coding supervisor and our Project Director.

Codes from the open-end recording sheets are then data-entered and merged with the CATI files.

The data processing staff then performs machine edits and additional cleaning of the entire data set.

Our edit program looks for errors in the form of: columns that contain inappropriate blanks; columns that contain multiple punches that were out of range; and response patterns that do not conform to the skip instructions contained in the questionnaires.

The program then lists all such errors by case number, question, and type. These are then resolved by senior EDP personnel, who inspects the original file and makes the appropriate corrections in the data file. Complete records of all such procedures are kept.

Data processing is conducted on a SUN SparcStation 2 by Harris staff, using Quantum software developed by Quantime Ltd.

## **APPENDIX B: THE QUESTIONNAIRE**

LOUIS HARRIS AND ASSOCIATES, INC.  
630 Fifth Avenue  
New York, NY 10111

FINAL 1

Study No. 933007 (Shopping)

December 13, 1993

FOR OFFICE USE ONLY:

Questionnaire No.: \_\_\_\_\_  
(1-5)

Card Number (6-7)

Sample Point No. \_\_\_\_\_  
2\* 24-25-26-27-28-29-30

Time Started: \_\_\_\_\_ A.M./P.M.

Interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

Area Code: \_\_\_\_\_ Telephone No.: \_\_\_\_\_ 2\*(12-18)  
2\*(9-11)

-----  
Hello, I'm \_\_\_\_\_ from Louis Harris and Associates, the national survey  
research firm in New York. We are conducting a Harris Poll. I would like to talk with  
the youngest (male/female person) adult in this household, 18 or over who is at home now.  
BE SURE TO GET THE YOUNGEST ADULT AVAILABLE  
-----

DRAFT QUESTIONS ABOUT TV SHOPPING PROGRAMS

## A. SCREEN

- A1. Do you ever watch shopping programs on TV such as QVC, Home Shopping or any other similar programs, or not?

Yes.....(15(100-1  
 No.....0-2 (SCREEN OUT)  
 Not sure.....0-3 (ASK FACTUALS)

- A2. How many days in a typical week do you usually watch TV shopping programs?

1/1/1 DAYS (ASK Q.A3) Mean = 2  
 (16) Median = 2  
 Less than once a week.....(16(0-9] (SCREEN OUT)  
 Not sure.....0-y] (ASK FACTUALS)

- A3. During the last month, on how many days did you watch a TV shopping program?

1/1/1 DAYS Mean = 9  
 (17-18) Median = 5  
 Not sure.....(17(7-y

## B. VIEWER'S QUESTIONS

- B1. Do you usually watch TV shopping programs only to buy something, mainly expecting to buy something, mainly for entertainment and interest, only for entertainment and interest or equally to buy something and for entertainment and interest?

SINGLE RECORD

Only to buy something.....(19( 5 -1  
 Mainly expecting to buy something.....9 -2  
 Mainly for entertainment and interest.....32 -3  
 Only for entertainment and interest.....21 -4  
 Equally to buy something and for  
 entertainment and interest.....30 -5  
 Not sure.....4 -6

- B2. How (READ EACH ITEM) do you find TV shopping -- very, somewhat, not very or not at all?

ROTATE -- START AT "X"	Very	Somewhat	Not Very	Not At All	Not Sure
( ) 1. Interesting . . . . .	(20( <u>29</u> -1	<u>53</u> -2	<u>10</u> -3	<u>8</u> -4	<u>1</u> -5
( ) 2. Entertaining . . . . .	(21( <u>23</u> -1	<u>53</u> -2	<u>14</u> -3	<u>9</u> -4	<u>1</u> -5
( ) 3. Amusing . . . . .	(22( <u>17</u> -1	<u>47</u> -2	<u>19</u> -3	<u>15</u> -4	<u>1</u> -5
( ) 4. Informative . . . . .	(23( <u>35</u> -1	<u>45</u> -2	<u>12</u> -3	<u>7</u> -4	<u>1</u> -5
( ) 5. Useful . . . . .	(24( <u>28</u> -1	<u>43</u> -2	<u>15</u> -3	<u>11</u> -4	<u>2</u> -5

- B3. The last time you watched a TV shopping program did you buy anything or not?

Yes.....(25( 10 -1  
 No.....90 -2  
 Not sure.....\* -3

- B4. Over the LAST MONTH have you bought anything while watching a TV shopping program or not? Do not include items advertised during commercials on regular TV programs.

Yes.....(26( 19 -1 (ASK Q.B5)  
 No.....80 -2 } (SKIP TO Q.B6)  
 Not sure.....\* -3 }

- B5. How many times did you buy something from the TV shopping program in the last month?

/ / / NUMBER OF TIMES Mean = 3  
 (27-28) Median = 2

Not sure.....(27( 1 -y



B6. How important to you are the following reasons for watching TV shopping programs? Is (READ EACH ITEM) - very important, somewhat important, not very important, or not at all important?

ROTATE -- START AT "X"	Very Important	Somewhat Important	Not Very Important	Not At All Important	Not Sure
( ) 1. Watching a certain host or hostess (29( <u>17</u> -1 <u>26</u> -2 <u>23</u> -3 <u>32</u> -4 <u>1</u> -5					
( ) 2. Watching celebrities, sports figures, film stars and TV personalities . . . . . (30( <u>17</u> -1 <u>31</u> -2 <u>23</u> -3 <u>29</u> -4 <u>*</u> -5					
( ) 3. Hearing live testimonials from other viewers . . . . . (31( <u>21</u> -1 <u>34</u> -2 <u>20</u> -3 <u>24</u> -4 <u>1</u> -5					
( ) 4. Information regarding products . . (32( <u>54</u> -1 <u>31</u> -2 <u>8</u> -3 <u>6</u> -4 <u>1</u> -5					
( ) 5. Entertainment value . . . . . (33( <u>20</u> -1 <u>45</u> -2 <u>19</u> -3 <u>15</u> -4 <u>1</u> -5					

B7a. Do you ever watch TV shopping programs (READ EACH ITEM), or not?

ROTATE -- START AT "X"	Watch	Do Not Watch	Not Sure
( ) 1. During the daytime . . . . . (34( <u>53</u> -1 <u>47</u> -2 <u>1</u> -3			
( ) 2. In the evening . . . . . (35( <u>70</u> -1 <u>29</u> -2 <u>*</u> -3			
( ) 3. Late at night . . . . . (36( <u>54</u> -1 <u>46</u> -2 <u>*</u> -3			

B7b. When are you most likely to watch TV shopping programs? READ LIST -- SINGLE RECORD BELOW

During the daytime.....(37( 27 -1  
In the evening.....38 -2  
Late at night.....34 -3  
Not sure.....1 -4

B8. How often do you watch (READ EACH ITEM) - very often, somewhat often, not very often or not at all?

ROTATE -- START AT "X"	Very Often	Some- what Often	Not Very Often	Not At All	Not Sure
( ) 1. Direct TV shopping (a regular 30-second one product advertisement) . . . . . (38( <u>17</u> -1 <u>35</u> -2 <u>31</u> -3 <u>14</u> -4 <u>2</u> -5					
( ) 2. Informational programs (a 30-minute one product advertisement) . . . . (39( <u>10</u> -1 <u>29</u> -2 <u>38</u> -3 <u>22</u> -4 <u>*</u> -5					
( ) 3. TV shopping (advertising six or seven products within an hour continually) . . . . . (40( <u>12</u> -1 <u>32</u> -2 <u>40</u> -3 <u>15</u> -4 <u>1</u> -5					